

ATTACHMENT 4

TECHNICAL DATA PACKAGE (TDP)

CONTRACT REQUIREMENTS

for the

Intermediate Level

Test Program Sets (TPS)/
Operational Test Program Sets (OTPSs)

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

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1. SCOPE

1.1 Scope. This attachment describes the Technical Data Package (TDP) requirements for Operational Test Program Sets (OTPS).

2. APPLICABLE DOCUMENTS

2.1 Government documents. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issue of this document is that listed in the issue of the Department of Defense Index of Specification and Standards (DoDISS) and supplements thereto, cited in the solicitation (see 6.2). The latest revision of the referenced documents as of the date of the contract award is applicable.

MIL-STD-31000 - DEPARTMENT OF DEFENSE, STANDARD PRACTICE,
TECHNICAL DATA PACKAGES

(Copies of these documents are available online at <http://assist.daps.dla.mil/quicksearch//> or from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

CDEX Compact Disk Exchange Specification

(Available at www.edms.redstone.army.mil/Cdex/Cdex.html)

3. REQUIREMENTS

3.1 Technical data package (TDP). The TDP shall be prepared in accordance with MIL-STD-31000. The TDP shall consist of the product drawings and associated lists necessary for the re-engineering, manufacture, in service engineering and logistics support of Operational Test Program Set Hardware (OTPH). These include, but are not limited to, engineering drawings, related data and lists, and descriptive specifications (see enclosure 1). The information contained within the TDP shall describe the product design established at the initial Government approved product baseline and include subsequent changes and revisions up to the time of the last submittal. Drawing numbers shall not be assigned to the Operational Test Program Media (OTPM) nor the Operational Test Program Instruction (OTPI) media.

3.2 Units of measure. The TDP shall be based on U.S. customary linear units (decimal inch) as the basic unit of measure

3.3 Supplemental requirements. The following are supplemental requirements for the TDP.

3.3.1 Indentured data lists. TDP option selection worksheet-product drawings and associated lists identifies in Block 6 (e) a requirement for an indentured data list, (excludes nationally recognized military and industry specifications and standards). This list shall include:

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(a) a sequence of both part numbers and associated drawing numbers comprising the end item in a lateral and descending family tree/top down breakdown

(b) a top down breakdown of the end item including all lower level items, listing every assembly, subassembly and part;

(c) every item listed in it's relationship to the end item, subassembly, assembly or system of which it is a part

(d) a relationship as shown by means of physical indenture or numeric sequence, with the indenture indicating that the item is a part of the preceding item

3.3.2 Circuit Card Assemblies (CCA) Drawings. CCA drawings shall include specific input and output requirements, design specifications and acceptance test requirements. The acceptance test requirements shall not require use of the ATE specified in the contract.

4. PREPARATION AND MANAGEMENT RESPONSIBILITY

4.1 Drawing revisions. Revisions to the TDP shall comply with ASME Y14.35M. TDP elements or sub-elements, when found to be defective and/or rejected as unacceptable by the Government, shall not be permitted for use in formal Government technical audits, logistics conferences, or technical manual final inspection.

4.2 Conferences, reviews, and audits. The Contractor shall host and participate in TDP guidance conferences, in-process reviews, Physical Configuration Audits (PCA), and final technical review for digital data.

4.2.1 TDP guidance conference. The Government will convene the TDP guidance conference ninety (90) days after contract award at the Contractor's facility to discuss in detail the TDP requirements. The Contractor shall discuss their approach for the preparation and management of the TDP. The TDP guidance conference will, as a minimum, include the following discussion topics:

(a) identification of contract end items, the TDP elements, and associated management data

b) requirements for TDP elements contained in Statement of Work (SOW), Contract Data Requirements Lists (CDRLs), Data Item Descriptions (DIDs), TDPCR, and applicable specifications and standards

(c) quality assurance procedures relating to TDP, including control of subcontractor and vendor TDP elements

(d) TDP review and inspection requirements and schedules

(e) TDP delivery requirements and schedules

(f) review TDP drafting practices and formats

- (g) review TDP document numbering systems
- (h) TDP rights marking procedures and policies
- (i) subcontractors or vendors roles in delivering data under the contract
- (j) distribution statements marking and control
- (k) TDP configuration management system, including methods for releasing TDP elements, TDP validation requirements, approving TDP, and incorporating changes into the data package
- (l) organization for developing, releasing, and controlling TDP elements
- (m) control of TDP elements in digital form, include updates and transfer, and identification of exchange protocols required by the contract
- (n) review of corrective action procedures to arrive at corrected TDP submittal, as outlined in this TDPCR for documented discrepancies
- (o) establish most efficient media types and initial sample candidates for in-process review and final submittals
- (p) review of design disclosure criteria and related interface with design compliance documents

4.2.2 In-process reviews. Periodic in-process reviews will be conducted during the development of the TDP as specified in the Contractors Master Schedule. These reviews are team meetings during which an evaluation of progress on TDP documentation is held. Reviews may be held at the Contractor's facility or conducted off-site by the review activity.

4.2.3 Physical Configuration Audit (PCA). The PCA shall be conducted as defined by the Attachment 3, the General Acceptance Test Procedures (GATP). Data supplied for PCA shall have no outstanding, unincorporated engineering change orders.

4.2.4 Final technical review for digital deliveries. This review evaluates the final form TDP elements for contract compliance for digital deliveries. The following statements provide verification requirements.

(a) When final delivery of the product definition data elements is to be in any other non-standard digital format, a sample (identify at guidance conference) shall be sent to the procuring activity along with a hard copy of the data files provided on digital media. These data should contain sample data and drawing files in the formats scheduled for delivery. The procuring activity and the Fleet Support Team (FST) will verify the sample digital delivery against the

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hardcopy to verify that the test media accurately depicts the original data files and that the delivery media will work successfully on Government equipment.

(b) A Product definition data file containing multiple file formats for defining an item or system shall contain a data index file to catalog and label each separate file format, including an association list to link the file formats together.

4.2.5 TDP discrepancy notification and correction. Written description and notification of TDP discrepancies uncovered and noted during, or as a result of, formal reviews and audits will be provided by the Government. Documented discrepancies shall be corrected and presented to the Government for comparison prior to the next TDP in-process review or audit.

4.2.6 Data and equipment. The following data and equipment shall be made available for inspection or select item builds to support each conference, review, or audit.

- (a) Appropriate TDP elements
- (b) Engineering Change Notices (ECNs)
- (c) Deviations and waivers
- (d) Hardware items
- (e) Quality assurance data
- (f) Minutes of previous TDP reviews
- (g) Outstanding discrepancies from previous reviews (action items)
- (h) Subcontractor and vendor data
- (i) Applicable company standards, policies, procedures, and records
- (j) Various measuring equipment necessary for the PCA.

| TDP OPTION SELECTION WORKSHEET | | | |
|--|---|--|--|
| SYSTEM: | | DATE PREPARED: | |
| A. CONTRACT NO. TBA | B. EXHIBIT/ATTACHMENT NO. A | C. CLIN | D. CDRL DATA ITEM NO. A008 |
| 1. TDP Level (X and complete as applicable.) | | | |
| A. <input type="checkbox"/> CONCEPTUAL LEVEL <input type="checkbox"/> DEVELOPMENTAL LEVEL <input checked="" type="checkbox"/> PRODUCTION LEVEL | B. REMARKS: | | |
| 2. TYPE AND FORMAT (X all that apply and complete as applicable) | | | |
| A. <input type="checkbox"/> TYPE 2D: 2D DRAWINGS <input type="checkbox"/> TYPE 3D: 3D MODEL ONLY <input checked="" type="checkbox"/> TYPE 3D: 3D MODELS WITH ASSOCIATED 2D DRAWINGS | B. <input checked="" type="checkbox"/> NATIVE CAD (SPECIFY TYPE) <u>TBA</u> <input type="checkbox"/> ISO 10303 STEP FORMAT (Specify STEP PROTOCOL AP203, AP 214 etc.) <input checked="" type="checkbox"/> ISO32000 PORTABLE DOCUMENT FORMAT: <u>IAW ATTACHMENT 4 REQUIREMENTS</u> <input type="checkbox"/> OTHER ELECTRONIC FORMAT (SPECIFY TYPE) <input checked="" type="checkbox"/> HARDCOPY: <u>SUPPORT IN-PROCESS REVIEWS AND TECHEVAL</u> REMARKS: _____ | | |
| 3. CAGE Code AND DOCUMENT NUMBERS | | A. <input type="checkbox"/> CONTRACTOR CAGE AND DOCUMENT NUMBERS <input checked="" type="checkbox"/> GOVERNMENT CAGE (COMPLETE 3B & 3C OR 3D) | D. To Be Assigned By: NAVAIR NORTH ISLAND CASFAC 6.8.5.2 |
| B. USE CAGE CODE: 30003 | | C. USE DOCUMENT NUMBERS: | |
| 4. DRAWING FORMATS (X one and complete as applicable) | | | |
| <input checked="" type="checkbox"/> CONTRACTOR FORMAT. <input type="checkbox"/> GOVERNMENT FORMAT. REMARKS: _____ | | | |
| 5. TDP ELEMENTS REQUIRED (X all that apply) | | | |
| <input type="checkbox"/> ELEMENTS REQUIRED TO BE DETERMINED BY CONTRACTOR-OR THE FOLLOWING ARE REQUIRED: <input type="checkbox"/> CONCEPTUAL DRAWINGS/MODELS AND ASSOCIATED LISTS <input type="checkbox"/> DEVELOPMENTAL DESIGN DRAWINGS/MODELS AND ASSOCIATED LISTS <input checked="" type="checkbox"/> PRODUCT DRAWINGS/MODELS AND ASSOCIATED LIST <input type="checkbox"/> COMMERCIAL DRAWINGS/MODELS AND ASSOCIATED LIST <input type="checkbox"/> QUALITY ASSURANCE PROVISIONS <input type="checkbox"/> SPECIAL INSPECTION EQUIPMENT (SIE) DRAWINGS/MODELS AND ASSOCIATED LISTS <input type="checkbox"/> SPECIFICATIONS <input type="checkbox"/> SOFTWARE DOCUMENTATION <input type="checkbox"/> SPECIAL PACKAGING INSTRUCTIONS (SPI) DRAWINGS/MODELS AND ASSOCIATED LIST | | | |
| 6. ASSOCIATED LISTS (X and complete as applicable) | | | |
| <input checked="" type="checkbox"/> A. PARTS LIST (X ONE) | <input type="checkbox"/> (1) INTEGRAL | <input checked="" type="checkbox"/> (2) SEPARATE | |
| <input checked="" type="checkbox"/> B. DATA LIST (X ONE) | <input type="checkbox"/> (1) NOT REQUIRED | <input checked="" type="checkbox"/> (2) REQUIRED (SPECIFY LEVELS OF ASSEMBLY) | |
| <input type="checkbox"/> C. INDEX LIST (X ONE) | <input type="checkbox"/> (1) NOT REQUIRED | <input type="checkbox"/> (2) REQUIRED (SPECIFY LEVELS OF ASSEMBLY) | |
| <input checked="" type="checkbox"/> D. WIRING LIST (X ONE) | <input type="checkbox"/> (1) NOT REQUIRED | <input checked="" type="checkbox"/> (2) REQUIRED (SPECIFY LEVELS OF ASSEMBLY) | |
| <input checked="" type="checkbox"/> E. INDENTURE DATA LIST (X ONE) | <input type="checkbox"/> (1) NOT REQUIRED | <input checked="" type="checkbox"/> (2) REQUIRED (SPECIFY LEVELS OF ASSEMBLY) | |
| <input type="checkbox"/> F. APPLICATION LISTS (X ONE) | <input type="checkbox"/> (1) NOT REQUIRED | <input type="checkbox"/> (2) REQUIRED (SPECIFY LEVELS OF ASSEMBLY) | |
| 7. APPLICABILITY OF STANDARDS. The following Standards apply: (X as applicable) | | | |
| <input checked="" type="checkbox"/> ASME Y14.100 ENGINEERING DRAWING PRACTICES WITH APPENDICES <input checked="" type="checkbox"/> B <input checked="" type="checkbox"/> C <input checked="" type="checkbox"/> D <input checked="" type="checkbox"/> E | <input checked="" type="checkbox"/> ASME Y14.24 TYPES AND APPLICATIONS OF ENGINEERING DRAWINGS <input checked="" type="checkbox"/> ASME Y14.34 ASSOCIATED LIST <input checked="" type="checkbox"/> ASME Y14.35 REVISION OF ENGINEERING DRAWINGS AND ASSOCIATED LIST <input checked="" type="checkbox"/> ASME Y14.41 DIGITAL PRODUCT DATA PRACTICES <input checked="" type="checkbox"/> ASME Y14.5 DIMENSIONING AND TOLERANCES | | <input type="checkbox"/> OTHER STANDARDS APPLY AS DESCRIBED: COMPANY STANDARDS PERMITTED: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |
| 8. OTHER TAILORING | | | |
| Block 5- Level of assembly shall be at the OTPS. When individual detail piece parts are assembled as an inseparable assembly, those details may be shown on a multi-detail drawing, provided that none of the detail parts will be provisioned as spare or repair parts. | | | |

